

29554

S/106/61/000/011/006/006
A055/A127

9,2150 (1159,1482)

AUTHOR: Firdman, R. A.

TITLE: Germanium and silicon power rectifiers.

PERIODICAL: Elektrosvyaz', no. 11, 1961, 64 - 72

TEXT: 1) Germanium rectifiers. - The author presents the main technical data concerning the germanium rectifiers manufactured to-day in the Soviet Union, and particularly at the "Elektrovypryamitel'" Plant. These data are grouped in four tables. The author reproduces the recommendations of the Commission of Conversion Technique at the GNTK USSR concerning new classifications of germanium rectifiers: a) - classification according to the permissible amplitude of the reverse voltage. There are seven classes, specified in a table. b) - classification according to the voltage drop (forward voltage drop in single-phase, half-wave current flows through the rectifier). There are five groups, specified in a table. c) - The germanium rectifier types ("VG-5" to "VGV-1000") are limited to eight groups: five with air cooling ("VG") and three with water cooling ("VGV") A table shows the voltage drop and the permissible amplitude of the reverse voltage for all these types. 2) Silicon rectifiers. - The author presents some gene-

Card 1/3

29554
S/106/61/000/011/006/006
A055/A127

Germanium and silicon power rectifiers

ral considerations. He states that the Laboratory "VEI imeni V. I. Lenin" has designed silicon rectifiers: "VK-10" for 10 amp and 50 - 200v; "V-50" for 50 amp (without radiator) and for 100 amp (with radiator) 50 - 200 v; "VK-100" for 100 amp, 50 - 200 v (all these types are with air cooling), and "VKV-200" for 200 amp with water cooling. These designs have been put into production. The main technical data of these silicon rectifier types are presented in two tables. (Silicon rectifiers for 400 milliamp. 100, 200, 300 and 400 v are also manufactured.) The new classifications recommended by the "GNTK" Commission for silicon rectifiers are: a) - classification according to the permissible amplitude of the reverse voltage. There are ten classes, specified in a table. b) - classification according to the voltage drop. There are five groups, specified in a table. c) - The silicon rectifier types "VK-10" to "VKV-1000" are limited to nine groups: six with air cooling ("VK") and three with water cooling ("VKV"). A table shows the voltage drop and the permissible amplitude of the reverse voltage for all these rectifier types. 3) Controlled rectifiers. The author presents the parameters of four manufactured variants of controlled rectifier as follows: the average forward current at $t = 65^{\circ} C$ is 15 amp; the half-wave current pulse is 150 amp; the temperature range is from -65° and $+150^{\circ}C$; the maximum forward voltage drop is

Card 2/3

Germanium and silicon power rectifiers

29554
S/106/61/000/011/006/006
A055/A127

0.75 v; the maximum reverse current is 5 milliamp; the maximum control current for unblocking is 25 milliamp; the maximum control voltage for unblocking is 3 v; the holding current is 10 milliamp; the forward breakdown voltage (four variants) is 25, 75, 150 or 300 v. There are 15 figures, 13 tables and 3 Soviet-bloc references.

SUBMITTED: August 5, 1960.

X

Card 3/3

CZECHOSLOVAKIA

CAPKOVA, A; FIRED, V.

1. Institute of Theoretical Bases of Chemical Technology, Czechoslovak Academy of Sciences; 2. Institute of Physical Chemistry of the Technical Higher School of Chemistry, Prague

Prague, Collection of Czechoslovak Chemical Communications, Vol 8, 1963, pp 2235-2239

"Equilibrium Liquid-Steam XXX.. System of Vinylacetate Acetic Acid."

PALIYENKO, G. D., redaktor; FIRMENSHTEYN, A.A., redaktor; AKSENOV, G.G.,
tekhnicheskiy redaktor

[Model work norms and conversion of operations to working-day units
for collective farms in the Ukraine] Primernye normy vyrabotki i
rastsenki rabot v trudodniakh dlia kolkhozov Ukrainskoi SSSR. Kiev,
Gos. izd-vo Sel'khoz. lit-ry, 1948. 202 p. (MLRA 10:3)

1. Ukraine. Ministerstvo sel'skogo khozyaystva.
(Ukraine--Collective farms) (Wages)
(Agriculture--Production standards)

TRUNIN-DONIKOV, V.N.; FIRER, A.S.

Input of some speech data signs in the BESM-2 digital computer.
Soob. po vych. tekhn. no.4:3-8 '65. (MIRA 18:9)

TRUNIN-DONSKOY, V.N.; FIRER, A.S.; KULAGIN, M.V.

Algorithm for the recognition of a limited number of sound
images. Soob. po vych. tekhn. no.4:9-37 '65. (MIRA 18:9)

L 18468-66 EWT(d)/T/EWP(1) IJP(c) BB/00

ACC NR: AT6004640 SOURCE CODE: UR/3190/65/000/004/0003/0008

AUTHOR: Trunin-Donskoy, V. N.; Firer, A. S.

ORG: none

TITLE: The introduction of certain speech characteristics into the BESM-2 electronic computer

SOURCE: AN SSSR. Vychislitel'nyy tsentr. Soobshcheniya po vychislitel'noy tekhnike, no. 4, 1965. Vvod i obrabotka spetsial'noy informatsii v EVM (Input and processing of special information in the electronic computer), 3-8

TOPIC TAGS: speech recognition, computer application, computer input unit

ABSTRACT: One of the trends in computer speech recognition is the machine analysis of speech characteristics obtained by circuits containing Schmidt triggers. Such circuits separating out threshold speech characteristics can be found in a paper by G. L. Tsemel' (Problemy peredachi informatsii, vyp. 18, M., Izd-vo AN SSSR, 1964) who also discussed optimum speech characteristics. The present paper discusses in considerable technical detail the introduction of information supplied by the threshold circuits into the

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Card 1/2

L 18468-66

ACC NR: AT6004640

BESM-2 electronic computer. The circuitry connecting such units with the channels of the computer was developed and built at Computer Center, AN SSSR (Vychislitel'nyy tsentr, AN SSSR) in 1963. The circuits functioned normally and made possible the input of sets of characteristics of word attributes into the computer memories for analysis and readout. Orig. art. has: 5 figures.

SUB CODE: 09. / SUBM DATE: none / ORIG REF: 002

Card 2/2 *jk*

USSR/Human and Animal Physiology - Metabolism. Ferments.

T-1

Abs Jour : Ref Zhur - Biol., No 18, 1958, 83943

Author : Firer, L.D., Khanitov, Kh.S.

Inst : -

Title : Kinetics of Cholinesterase of Smooth Muscle Organs after the Removal of the Pancreas in Frogs.

Orig Pub : Byul. eksperim. biol. i med., 1957, 44, No 11, 14-17

Abstract : Before and beginning with the 2nd to 14th days after removal of the pancreas (P), cholinesterase (CE) activity within smooth muscle organs of frogs was determined. The stomach's muscular layers, abdominal aorta tissue, lung parenchyma, and urine bladder were used as specimens for the investigation. During the fall and winter seasons, CE activity was constant in intact animals. It became sharply intensified in spring, during March and April, and then again returned to its initial magnitude. After P was removed, CE activity of smooth muscle organs became more intensive.

Card 1/2

USSR/Human and Animal Physiology - Metabolism. Ferments.

T-1

Abs Jour : Ref Zhur - Biol., No 18, 1958, 83943

Normalization then followed 10-12 days after the operation. If acetylcholine was introduced to the animals on days when CE content deviated most from the norm (6-9th day), CE activity was of normal magnitude, or somewhat lower. It is assumed that higher intensity of CE activity is connected with quantitative decreases of acetylcholine which forms within the organism, and that this phenomenon presents one of the essential factors responsible for the disruption of parasympathetic and somatic nervous system activities in animals whose pancreas has been removed.
-- M.N. Vol'pe

Card 2/2

LAPITSKIY, V.I.; TARAPAY, M.A.; OKHOTSKIY, V.B.; LAYKO, B.G.; FIRER, L.M.

Prinimali uchastiye: SESYUK, G.S. [deceased]; KUSHNAREV, I.I.;
PATLAN', Ye.F.; PITOSHNIHENKO, G.P.; SOSEDKO, P.M.

Ways of reducing wheel discards because of angular segregation.

Izv. vys. ucheb. zav.; Chern. met. 7 no. 7:84-89 '64

(MIRA 17:8)

1. Dnepropetrovskiy metallurgicheskiy institut i Zavod im.
K. Libknekhta.

BCS FIRER, M. Ya.

Release

851. Experience in drawing glass from a free surface.—D. V. ZALIZNYAK, M. Ya. FIRER, E. P. MALJAK and T. I. KUDRINA (Sov. Kozm., 8, No. 9, 3, 1931). Expts. with various types of debiteuses and screens for the free drawing of glass are briefly described. (3 figs., 1 table.)

14. Thermal preparation of glass batches.—Y. V. KONOVALOV, V. I. CHECHETKIN, D. V. ZILIZNYAK, and M. YA. FIKS (*Glass and Ceramics*, Moscow 14, No. 7, 1, 1957). In Russian. Experiments were made on "batch fritting" in which the batch is charged into the tank as hot briquettes (at 300°-900°). Melting time should be considerably reduced since some of the silicate-forming reactions take place in the tank on special agglomerating conveyors. Previous experiments of the USSR, France, and Germany did not lead to any practical results, e.g. attempts to carry out fritting in rotary kilns failed because at the relatively low temperatures the material adhered to the kiln walls and the inner layers did not receive product. The proposed method is based on a catalytic flameless combustion of gas with the material in which the gas is drawn into permeable layers of the material.

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AUTHORS: Konovalov, V. V., Chechetkin, V. I., SOV/72-58-7-5/19
Zaloznyak, D. V., Firer, M. Ya.

TITLE: Semi-Industrial Investigations of the Thermal Preparation of
Glass Layers (Polupromyshlennyye issledovaniya termicheskoy
podgotovki stekol'nykh shikht)

PERIODICAL: Steklo i keramika, 1958, Nr 7, pp. 17 - 24 (USSR)

ABSTRACT: Such a sintering device is shown in figures 1 and 2 and is
described afterwards. The tests were carried out with two types
of layers: the test-and the working layer, the compositions of
which are given in table 1. The curves of the rise in temperature
during the sintering of the two layers under the same conditions,
are given in figure 3. The curves of the dependence of the
 Na_2SO_4 -content in finished agglomerates on the relation of gas
and air in the induction mixture for 2 sulfate-soda layers are
given in figure 4, and are described in full details. The tem-
perature curves obtained with the sintering of the test layer
are given in figure 5. Further the authors report on the filling
weight of the agglomerated glass layers, as well as also on the
productiveness of the agglomerates. The most advantageous height

Card 1/3

Semi-Industrial Investigations of the Thermal Preparation of Glass Layers

SOV/72-58-7-5/19

of layer during sintering, as well as the optimum velocities of this process are given in table 2. The duration of the heat treatment, as well as the curves of vacuum-changes for different types of layers and heights are given (Figures 6,7 and 8). The heat-treatment lasts 9 to 10 minutes. Then, the consumption of loosening- and foundation material, as well as the gas consumption for the heat treatment of the layer are given. The dependence of the specific gas consumption on the excessive air supply for various layers is shown (Fig 9). The recommended gas processes for some glass-layers are given in table 3. The dependence of the gas consumption on the duration of the heat treatment and the sintering speed are illustrated by means of curves (Figs 10 and 11). Such a device has been developed for a tank furnace of the Gomel' Glass-Works on the basis of the semi-industrial tests carried out. A test series of the glass melting of heat-treated layers was carried out by which the technical and economic efficiency of their industrial use was proved. There are 11 figures, 3 tables, and 2 Soviet references.

Card 2/3

Semi-Industrial Investigations of the Thermal Preparation of Glass Layers

SOV/72-58-7-5/19

1. Glass--Processing
2. Glass--Sintering
3. Glass--Temperature factors

Card 3/3

AUTHORS: Korobko, M. I., Zaliznyak, D. V., Firer, M. Ya., 72-58-3-5/15
Statsenko, A. V., Khrizman, S. S.

TITLE: Automatic Pressure-Regulation in Glass-Melting Furnaces
(Avtomaticheskoye regulirovaniye davleniya v steklovarenykh
pechakh)

PERIODICAL: Steklo i Keramika, 1958, ¹⁵ Nr 3, pp. 17-22 (USSR)

ABSTRACT: The major part of the continuous glass-melting furnaces has a regulation of pressure which is carried out by an electro-hydraulic system. Tests with this were carried out in 1952 by V.G. Gutop and V. M. Obukhov in the Gusevskiy glassworks imeni Dzerzhinskiy (reference 2). Their insufficient reliability and complication was proved in practice. This induced some members of the personnel, amongst whom there was also V. M. Obukhov, to propose other systems of pressure - regulation. A series of systems is compared with each other in this work. The regime of chamber pressure has a great influence on the technology and thermodynamics of glass - melting, since it produces the gaseous atmosphere required above the metal. Special importance is attributed to the

Card 1/3

Automatic Pressure-Regulation in Glass-Melting Furnaces

72-58-3-5/15

gaseous and hydraulic regime during the operation with a layer of soda-sulfate, as it was proved in the practice of the Gomel' glassworks. The composition of the exhaust gases of system number 1 of the glass-works at Gomel, is shown in table 1. With respect to the problem of pressure-regulation, the authors refer to the works by M. I. Korobko (reference 1), V. G. Gutop and B. M. Usvitskiy (references 1 and 2). An electro-hydraulic system of pressure-regulation is shown in figure 1. Further, the deficiencies of the hydraulic systems are fully described and the advantages of an electric system, as well as of the rotary slide valves, are pointed out. Data on both equipment and cost of various systems of regulation are given in the table 2. The following component parts of this system are given: an electric manometer **DMR**, regulator **RDM - 3**, recording mechanism **TNSK**, magneto-starter **MPKRO-210**, executive mechanism **IMT 25/120**, electron regulator **EPR**, and others. 3 systems of regulation are represented in figures 3, 4 and 5 and a diagram of the recording device is shown in figure 6. The automatic pressure regulation in the furnace, based on the measurement at one point, is qualified as insufficient. The use of the regulator **EPR** of the Institute for Gas-Utilization AN Ukrainian SSR

Card 2/3

. Automatic Pressure-Regulation in Glass-Melting Furnaces

72-58-3-5/15

which regulates all sections of the furnace (figure 7) and which was experimentally used in the Gomel glassworks, is recommended. There are 7 figures, 2 tables, and 7 references, 7 of which are Soviet.

1. Glass--Production

Card 3/3

15(2)

AUTHORS:

Zaliznyak, D. V., Firer, M. Ya., Konovalov, V. V., Chechetkin, V. I., Dunayev, V. G.

SOV/72-59-10-6/14

TITLE:

The Influence of Thermal Preparation of the Charge on Glass Frits

PERIODICAL:

Steklo i keramika, 1959, Nr 10, pp 21 - 27 (USSR)

ABSTRACT:

In the years 1952-1954, the Moskovskiy gornyy institut (Moscow Mining Institute) together with the Gomel' Glassworks carried out investigations of the thermal preparation of glass charges (Footnote 1). Experiments on the melting of the sintered charge in continuous glass-melting furnaces were carried out at the Gomel' Glassworks, and experiments of comparative melting concerning the initial and the sintered charge were carried out at the laboratory of the first Kafedra silikatov i stekla Belorusskogo politekhnicheskogo instituta (Chair for Silicates and Glass of the Belorussian Polytechnic Institute), at the Laboratory for Glass-Melting, as well as at the test plant of the institut stekla (Glass Institute) (Footnote 2). It was established that the melting time of the sintered charge depends on its content of free Na_2SO_4 (Fig 1), as well as on the temper-

Card 1/3

The Influence of Thermal Preparation of the Charge on Glass Frits SOV/72-59-10-6/14

ature of the sintered charge (Fig 2). It may be seen from figures 3,4,5, and 6 that vitrification is considerably accelerated during the melting of the sintered charge. The melting time of the initial and the sintered charges is shown in table 1. As may be seen from figure 7, the maximum furnace temperature was 1350°. The chemical analyses of the glasses from the sintered and initial charge are shown in table 2. Experiments showed that at furnace temperatures of from 1350 to 1450°, the entire melting and the refining of glasses from the sintered charge afford better results as compared with the initial charge. Moreover, at equal charge weight, 20% more glass is obtained from the sintered charges than from the initial charge. The chemical analyses of two experimental batches of sintered charges are shown in table 3. By using a cold sintered charge, the furnace output can be increased by 25-30%, and by using a hot charge (at 800-900°), it can be increased by 35-40%, and the time of vitrification and refining can also be considerably reduced. According to indications of Professor N. V. Solomin (Footnote 3), the furnace campaign can be considerably lengthened by using a sintered charge. According

Card 2/3

The Influence of Thermal Preparation of the Charge on Glass Frits SOV/72-59-10-6/14

to indications of Professor M. G. Stepanenko (Footnote 4), the efficiency of such a glass-melting plant can also be considerably increased. Conclusions: As shown by the experiments, the thermal preparation of glass charges is of great interest for the glass industry. To utilize all the advantages of this process, its economic viewpoint should also be considered. There are 7 figures, 3 tables, and 5 references, 3 of which are Soviet.

Card 3/3

ZALIZNYAK, D.V.; GALDINA, N.M.; MAYEVSKIY, Ye.R.; MEL'NIK;
FIRER, M.Ya.; SHCHEKOTIKHINA, N.M.

Studying the performance of various refractories in the
glass tank furnaces of the Gomel' glass factory. Stek.i
ker. 19 no.9:4-7 S '62. (MIRA 15:9)

(Glass furnaces)
(Refractory materials—Testing)

GALDINA, N.M.; SHATOVA, N.P.; ZALIZNYAK, D.V.; MEL'NIK, Ye.P.; FIRER, M.Ya.

Service life of Bakor 33 and Korkhart Tsak refractories in
glass furnaces. Ogneupory 30 no.4:20-24 '65.

(MIRA 18:6)

1. Gosudarstvennyy institut stekla (for Galdina, Shatova).
2. Gomel'skiy stekol'nyy zavod (for Zaliznyak, Mel'nik, Firer).

FIRER, S. L.

"Regeneration of Bone Tissue in Cases of Fracture of Long Tubular Bones in Connection With Injury of Peripheral Nerves." Thesis for degree of Dr. Medical Sci. Sub 26, May 50, Acad. Med. Sci. USSR,

Summary 71, 4 Sep 52. Dissertations Presented for Degrees in Science and Engineering in Moscow in 1950. From Vechernyaya Moskva, Jan-Dec 1950.

EXCERPTA MEDICA Sec. 15 Vol. 11/9 Chost Sent 58

1932. EARLY RECOGNITION OF BONE AND JOINT TUBERCULOSIS IN THE LIGHT OF MODERN DATA ON THE PATHOGENESIS OF TUBERCULOSIS (Russian text) - Firer S. L., ZDRAVOOKHR. TADZHIK. 1956, 4 (21-24)

The symptomatology of early bone and joint tb is not very pronounced and it is therefore difficult to recognize it early in affected children. The author considers that this disease has its onset during the period of early generalization of the tuberculous infection. The early period is characterized by subfebrile temperature, general malaise, loss of appetite and absence of pains. Limitation of function occurs in those cases where the focus is situated near the cortical layer of bone, especially in the vicinity of a joint. This is accompanied by easy fatigability, fatigue on walking, weakness in the limbs, slight limping, and crying out during sleep. If the patient is confined to bed these manifestations may pass, but then they reappear and the periods of remission become shorter. Limping increases. Hypotonia and atrophy of the muscles appear very early. The onset of spondylitis can be noticed by a change in the child's stance, sluggishness in bending the body and in movements, with disappearance of these signs during the day; sometimes there are abdominal pains. The topography of the affected part of the skeleton is of diagnostic importance. Early recognition of the disease is the problem facing anti-tuberculosis clinics. This work in Tashkent has been performed by workers of the Uzbek Tuberculosis Institute with general orthopaedic examination of children. In 1949-1953 early forms of the disease were detected in 63 out of 13,117 children examined. In 1954 11 among 92 infected children were found to have early signs of bone and joint tb.

(S)

FIRER, S.L., dots.

Tomographic study of osteoarticular tuberculosis. Spor. trad. Uz.
nauch.-issl. tub. inst. 3:113-119 '57. (MIRA 14:5)
(BONES--TUBERCULOSIS) (BONES--RADIOGRAPHY)

OBⁿYEDKOVA, P.P.; STOLYARENKO, N.N.; FIRER, S.L., 'dots.

Surgical treatment of osteoarticular tuberculosis in adults.

Sbor. trud. Uz. nauch.-issl. tub. inst. 3:120-123 '57,

(MIRA 14:5)

(BONES—TUBERCULOSIS)

FIRER, S.L., dotsent (Tashkent)

"Tomography of the bones [translated from the Bulgarian]" by
G. Khadzhidekov and B. Botev. Reviewed by S.L. Firer. Vest.
rent. i rad. 37 no.1:83-84 Ja-F '62. (MIRA 15:3)
(BONES—RADIOGRAPHY)
(KHADZHIDEKOV, G.) (BOTEV, B.)

FIRER, S.L., dotsent (Tashkent)

Significance of tomography in timely detection of symptomless
tuberculous osteitis in children. Zdrav.Turk. 7 no.2:21-23 F
'63. (MIRA 16:4)

(BONES--RADIOGRAPHY)

(BONES--DISEASES)

ZHELTOV, I.I.; FIRER, S.I.

Method of an enlarged X-ray image for timely detection of
tubercular destructive changes in the bones. Zdrav. Tadzh.
10 no.5:44 '63. (MIRA 17:2)

1. Iz kafedry kostno-sustavnogo tuberkuleza Sredneaziatskogo
instituta usovershenstvovaniya vrachey.

FIRER, S.L., dotsent (Tashkent); KUTSENOK, B.S., prof. (Kiyev); KUTSENOK,
Ya.B., kand. med. nauk (Kiyev)

Book reviews. Ortop., travm. i protez. 25 no.9:80-84 S '64.
(MIRA 18:4)

CHERNAVSKIY, V.A. (Moskva); FIRER, S.I., dotsent (Tashkent)

Reviews. Ortop., travm. i protez. 26 no.5:90-93 My '65.
(MIRA 18:10)

16
Estimation Functions of the Transition Probabilities of a Markoff Chain

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Firescu, D. Sur les fonctions d'estimation des probabilités de passage d'une chaîne de Markoff. An. Univ. "C. I. Parhon" București. Ser. Ști. Nat. 7 (1958), no. 18, 9-18. (Romanian. Russian and French summaries)

Consider a simple homogeneous discontinuous Markoff chain with values a_1, a_2, \dots, a_m and transition probabilities p_{ij} ($i \in I_m, j \in I_m, I_m = (1, 2, \dots, m)$). Let n_i be the number of appearances of the state a_i in a sequence of n experiences and n_{ij} the number of appearances of the pair a_i, a_j in this sequence.

Put

$$V_s^n = \|n_{ij}, n_{ij}, \dots, n_{ij}\|, \quad r < m,$$

assuming that

$$P[x_1 = a_h] = p_{hh}$$

Supposing the matrix $\|p_{hk}\|$ undecomposable, the author proves the following theorems: I: The distribution law of the random variable

$$W_s^n = \frac{V_s^n - M(V_s^n)}{\sqrt{n}}, \quad s \in I_m,$$

tends, for $n \rightarrow \infty$, to the normal law of r dimensions; II: The reduced distribution law of the random vector

$$\left\| \frac{n_{ij}}{n} \quad \frac{n_{ij}}{n} \quad \dots \quad \frac{n_{ij}}{n} \right\|$$

tends, for $n \rightarrow \infty$, to the normal law for r dimensions.

With the aid of these theorems it is proved that the estimation functions n_{ij}/n ($s = 1, 2, \dots, r; r < m$) of the unknown probabilities p_{ij} are Gaussian.

The functions become efficient only in the case, considered by Gh. Mihoc, when $r = m$.

In order to establish these results, the author applies properties of a linear operator of the type used by Onicescu and Mihoc in their studies concerning Markoff chains.

O. Onicescu (Bucarest)

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AUTHORS:
TITLE:

Mihoc, G., Firescu, D.

Estimations for the parameter of a Markov chain with probability density

PERIODICAL:

Referativnyy zhurnal, Matematika, no. 3, 1962, 18, abstract 3V80. ("An. Univ. "C. I. Parhon". Ser. stiint. natur.", 1959, no. 22, 9-16)

TEXT:

Considered is a simple Markov chain with values on the straight line R_1 . The transition probabilities of the chain are given by the densities $f(x, y, \alpha)$, $x, y \in R_1$, $\alpha = (\alpha_1, \dots, \alpha_k)$ taking values from a certain open interval $I_k \subset R_k$.

It is supposed that the following conditions are satisfied: 1.) for arbitrary $x, y \in R_1$, $f(x, y, \alpha)$ is differentiable with respect to α_i ;

2.)
$$\frac{\partial}{\partial \alpha_i} \int_{R_1} f(x, y, \alpha) dy = \int_{R_1} \frac{\partial}{\partial \alpha_i} f(x, y, \alpha) dy;$$

Card 1/2

Estimations for the parameter of a ...

S/044/62/000/003/053/092
G111/C444

3.) There exists the integral

$$\int_{R_1} \frac{\partial \log f(x, y, \alpha)}{\partial \alpha_i} \frac{\partial \log f(x, y, \alpha)}{\partial \alpha_j} f(x, y, \alpha) dy, \quad i = 1, \dots, k.$$

It is shown that the representations

$$\frac{\partial \log f(x, y, \alpha)}{\partial \alpha_j} = \sum_{h=1}^k B_{jh}(\alpha) [N_h(x, y) - a_h]$$

for $\frac{\partial \log f(x, y, \alpha)}{\partial \alpha_i}$ are necessary and sufficient for the consistent estimate

$$\beta_h(x_1, x_2, \dots, x_n) = \frac{1}{n} \sum N_h(x_{i-1}, x_i)$$

be effective for the parameter $a_h (h=1, \dots, k)$
[Abstracter's note: Complete translation.]

Card 2/2

S/044/62/000/003/084/092
C111/C333

AUTHORS: Mihoc, Gh., Firescu, D.

TITLE: On some stochastic processes

PERIODICAL: Referativnyy zhurnal., Matematika, no. 3, 1962, 66,
abstract 3 V 395. ("An. Univ. "C.J. Parhon". Ser. stiint.
natur.", 1960, 9, no. 25, 141-148)

TEXT: Considered is an insurance method for which the insured pays the sum $\varphi(s,x)$, if in the interval $(s,s+ds)$, he is in the state x and obtains the sum $A(s,x,y)$, if in the moment s he changes from the state x into the state y ; x,y,s are continuously variable on the real number line. The probability densities are also given which correspond to a transition of the insured from the state x , in which the insured was in the time interval (t,s) , into a state from the interval $(y,y + dy)$ during the time $(s,s + ds)$. Under certain assumptions on the continuity there are deduced integro-differential equations for the net gain of the insured who is in an (arbitrary) state x during the time (t,s) , and for different densities of the transition probabilities.

[Abstracter's note : Complete translation.]

Card 1/1

MIHOC, G.; FIRESU, D.

Generalization of some stochastic processes. Comunicarile AR
12 no.7:773-781 J1 '62.

1. Membru corespondent al Academiei R.P.R. (for Mihoc).

FIRESCHU, D.

Functions of efficient estimation for the parameters of a family of stationary circumspect Markov chains. Studii cerc mat 14, no. 2: 197-207 '63.

FIRESCU, D.; THEILER, G.

Some problems of statistical inference relating to the homogeneous, finite, simple, Markov chains. Studii cerc mat 17 no.1:3-17 '65.

1. Center of Mathematical Statistics of the Rumanian Academy, 47 M.Eminescu St., Bucharest. Submitted June 15, 1964.

FIREVICH, A.

SHUTOV, I.; FIREVICH, A.

Chemical method for controlling tree sprouts in roadside ditches.
Avt.transp. 32 no.6:27-28 Je '54. (MLRA 7:9)
(Herbicides)

POPP, St., dr.; FIREZ, Al., dr.; GIOCAN, M., dr.

Considerations on upper digestive hemorrhages. Med. intern., Bucur
13 no.2:221-226 F '61.

1. Lucrare efectuata in Spitalul unificat de adulti nr. 1, Oradea.

(HEMORRHAGE, GASTROINTESTINAL etiology)

KOZLOV, V.M.; GUSEVA, N.S.; FIRFAROVA, I.B.

Anomalous behavior of iron-titanium concentrates in the course of their
solid-phase reduction. Zhur. prikl. khim. 38 no.7:1436-1443 J1 '65.
(MIRA 18:7)

1. Vsesoyuznyy alyuminiyevy-magnlyevyy institut.

Firfarova, K.F.

TUSTANOVSKIY, A.A.; STRACHITSKIY, K.I.; FIRFAROVA, K.F.

Collagenase activity of the K-toxin of *Clostridium welchii* (type A).
Vop.med.khim. 3:176-180 '51. (MIRA 11:4)

1. Laboratoriya khimii belkov organizma Instituta biologicheskoy
i meditsinskoy khimii AMN SSSR, Moskva.
(COLLAGENASE) (CLOSTRIDIUM PERFRINGENS) (TOXINS AND ANTOTOXINS)

Handwritten: Tustanovskiy, A.A.
TUSTANOVSKIY, A.A.; STRACHITSKIY, K.I.; FIRFAROVA, K.F.

Resistance of native and denatured procollagen and collagen to the
action of trypsin. Vop.med.khim. 4:47-52 '52. (MIRA 11:4)

1. Laboratoriya khimii belkov organizma Instituta biologicheskoy
i meditsinskoy khimii AMN SSSR, Moskva.
(TRYPSIN) (COLLAGEN) (PROCOLLAGEN)

FIRFAROVA, A.F.

STRACHITSKIY, K.I.; TUSTANOVSKIY, A.A.; FIRFAROVA, K.F.

Determining the activity of collagenase by the procollagen film method.
Vop.med.khim. 4:237-241 '52. (MIRA 11:4)

1. Laboratoriya khimii belkov organizma Instituta biologicheskoy
i meditsinskoy khimii AMN SSSR, Moskva.
(COLLAGENASE) (PROCOLLAGEN)
(CLOSTRIDIUM PERFRINGENS)

STRACHITSKIY, K.I.; FIRFAROVA, K.F.

Changes in the viscosity of protein solutions during heat denaturation,
Biokhimiya 18, 235-8 '53. (MLRA 6:4)
(CA 47 no.16:8133 '53)

1. Acad. Med. Sci., Moscow.

PIRFAROVA, K. F.

Chem Abs

V. 48 26 Jan 54

Biological Chem

Activation of heat-denatured serum albumin. K. I. Strachitski, K. F. Pirlarova, and A. E. Gurvich (Lab. Albumin Chem., Acad. Med. Sci. U.S.S.R., Moscow). *Biokhimiya* 18, 305-10(1953).—Changes in the structure of heat-denatured serum albumin are unstable and are easily reversed. It is, however, easy to stabilize (fix) them, owing to the consequent aggregation of serum albumin mols., which in their denatured state possess a heightened inter-reactivity leading to the formation of comparatively stable bonds. Horse serum albumin heated at pH 3.0 becomes denatured. Upon cooling it is reconverted to the original native albumin. Similarly, heated and denatured serum albumin will coagulate upon slight alkalization, while it is still warm. Upon further addn. of alk. soln. such denatured and coagulated serum albumin becomes reconverted to its original state as a result of disaggregation (depolymerization) of the coagulum. B. S. Levine

(4)



Physicochemical characteristics of the soluble proteins of the eye lens.

✓ CH Physicochemical characteristics of the soluble proteins of the eye lens. V. N. Orekhovich, K. F. Firiarova, and V. O. Shpilker (Inst. Biol. Med. Chem., Acad. Med. Sci. U.S.S.R., Moscow). *Ukrain. Biokhim. Zhur.* 27, 355-63 (1955) (in Russian).—Lenses of eyes of cattle and other animals were comminuted in a homogenizer in a ratio of 60 lenses per 15–200 ml. of distd. H₂O. The homogenate was allowed to stand for 60 min. at 5°, centrifuged twice, and the insol. protein was removed. Protein fractionation was as follows: 1. the clear lens ext. (NH₄)₂SO₄ was added to 0.3 satn. The 1st ppt. was dissolved in dist. H₂O and repptd. twice. To his first supernatant (NH₄)₂SO₄ up to 0.45 satn was then added, which completely pptd. the α-crystalline. The second ppt. was dissolved in H₂O and repptd. twice with 0.3 satn. of (NH₄)₂SO₄. (NH₄)₂SO₄ was then added to the original supernatant to 0.5 satn. The third pptn. isolate β-crystalline and γ'-crystalline. (NH₄)₂SO₄ was then added to the original supernatant to 0.8 satn. The fourth ppt. contained the remainder of β- and γ'-crystalline. (NH₄)₂SO₄ was then added to complete satn. The fifth ppt. contained the remainder of the proteins, leaving a protein free supernatant fluid. Electrophoretic sepn. was done by means of Tiselius app. in a buffer of pH 7.9, ionic strength 0.07 at 0.3 v./cm. gradient and +2°. Differential centrifugation was accomplished with a Svedberg ultracentrifuge. Diffusion index and specific vol. detns. were also made. In the lenses of many animals are present 6–7 sol. protein components which can be well differentiated electrophoretically. Pptn. with (NH₄)₂SO₄ failed to yield homogeneous components. The α-crystalline fraction obtained at 0.3 (NH₄)₂SO₄ satn. contains β-crystalline. Attempts to remove same by repeated pptn. resulted in a par-

tial denaturation of α-crystalline. Ultrafiltration of electrophoretically obtained α-crystalline produced results pointing to the monodisperse nature of that protein. Its sedimentation const. (S = 16.7 × 10⁻¹⁰) and diffusion constant (D = 1.85 × 10⁻⁷ cm.²/sec.) make possible the detn. of the mol. wt. of α-crystalline (800,000) as well as the degree of asymmetry (1/17). In the case of guinea pigs, rats, rabbits, and dogs the α-crystalline fraction of the lens contained another component which had a lower electrophoretic mobility. In the β-crystalline of the lens of cattle electrophoretic analysis showed the presence of 2 components. In all other animals the presence of 2 such components was even more clearly in evidence. Ultracentrifugation studies indicated the presence in fraction β-crystalline of 2 components; a lighter one, which corresponds to the component of greater electrophoretic mobility (β') having a mol. wt. of 45,000, and a heavier component, corresponding to the component of lower electrophoretic mobility (β'') having a mol. wt. of 100,000. In the fraction γ-crystalline of the lens of cattle electrophoresis disclosed 3 components as indicated by the ascending part of the graph. Generally, the amt. of γ-crystalline in the lens of the eye of cattle was lower than that of other animals. A β-crystalline-free γ-fraction was not obtained by fractional pptn. It was obtained electrophoretically and in only small amts. Ultracentrifugation studies of 0.5 (NH₄)₂SO₄ satn. fraction gave data regarding a component of γ-fraction, which was denoted as γ'-crystalline, having a mol. wt. of 500.

B. S. Levine

(2)

FIRFAROVA, K. F.

USSR/Human and Animal Physiology - Sensory Organs.

V-13

Abs Jour : Ref Zhur - Biol., No 1, 1958, 4518

Author : K. Firfarova

Inst : -

Title : On the Soluble Proteins of Eye Lenses.

Orig Pub : Vopr. med. khimii, 1956, No 1, 69-72

Abstract : Differing from other authors who have found 3-4 components in the soluble proteins of the crystalline lens, the author of the present paper found from 6 to 7 components. In all cases, she found α -, β - and γ -crystallins (Tizelius' apparatus). The α -crystallin from the lenses of rats, guinea-pigs, rabbits and dogs was composed of α_1 - and α_2 -crystallins. α -crystallin of humans and oxen showed only one component. β -crystallin of rats, guinea-pigs, dogs and humans is composed of β_1 - and β_2 -crystallins; that of rabbits - of β_1 -, β_2 - and β_3 -crystallins; that of oxen -

Card 1/2

Instit. Biol + Med. Chem., AS USSR

USSR/Human and Animal Physiology - Sensory Organs

V-13

Abs Jour : Ref Zhur - Biol., No 1, 1958, 4518

of one component. the γ -crystallin from the lenses of guinea-pigs, dogs and oxen includes 3 components (γ_1 , γ_2 and γ_3); that of rats, rabbits and humans - 2 components (γ_1 and γ_2). The observed heterogeneity of the proteins is a true one, it is not the result of the treatment of the proteins before electrophoresis (dialysis, storage at 0° , etc). Further electrophoretic tests of proteins of the lens which were not submitted to any preliminary treatment showed the same number of components in each fraction as in the first tests. Data are presented on the "podvizhnost'" [motility] of the soluble proteins of the crystalline lens and on the percentages of the various components of each fraction.

Card 2/2

FIRFAROVA, K.F.

FIRFAROVA, K.F., Cand Bio Sci--(Rios) "^{Whites}~~White~~ of the eye lens." Mos,
1959. 11 pp. (Acad of Ned Sci @ USSR. Inst of Bio and Med Chemistry),
200 copies. (KL,33-58, 117)

9.

FIRFAROVA, K.F.

Amino acid composition and terminal amino acids of α -crystalline
[with summary in English]. Biokhimiia 23 no.1:129-134 Ja-F '58.
(MIRA 11:3)

1. Institut biologicheskoy i meditsinskoy khimii AMN SSSR, Moskva.
(CRYSTALLINE LENS
 α -crystallin, amino acid composition & terminal amino
acids (Rus)

FIRFAROVA K.E., KHOKHLOVA O.S., CHERNIKOV M.P., YEVTIKHINA Z.F.,
KUNINA, O.V., LEVYANT M.I., ORÉKHOVICH V.N. (USSR)

"Tissue Proteinases in Spleen, Kidneys, Liver, Brain, and
Certain Forms of Transplanted Tumours."

Report presented at the 5th Int'l Biochemistry Congress,
Moscow, 10-16 Aug. 1961

FIRFAROVA, K. F., KEDROVA, Ye. M. (USSR)

Changes in the Proteins in the Crystalline Lens in Experimental Radiation
Cataract.

report presented at the 5th Int'l.
Biochemistry Congress, Moscow, 10-16 Aug. 1961

FIRFAROVA, K.F.; KEDROVA, Ye.M.

Change in the proteins of the crystalline lens in experimental radiation cataract. Vop. med. khim. 7 no.3:285-291 My-Je '61.
(MIRA 15:3)

1. Institute of Biological and Medical Chemistry, Academy of Medical Sciences of the U.S.S.R., Moscow.

(CATARACT)

(CRYSTALLINE LENS---RADIOGRAPHY)

(PROTEINS)

FIRFAROVA, K.F.; LEVDIKOVA, G.A.

Partition of β - and γ - crystallins using column electrophoresis.
Biokhimiia 26 no.4:626-629 JI-Ag '61. (MIRA 15:6)

1. Institute of Biological and Medical Chemistry, Academy of
Medical Sciences of the USSR, Moscow.
(CRYSTALLINE LENS) (PROTEINS)
(ELECTROPHORESIS)

FIRFAROVA, K.F.; MOROZKIN, A.D.; OREKHOVICH, V.N.

Isolation of proteinase from brain tissues. Biokhimiia 29 no.4:
673-679 J1-Ag '64. (MIRA 18:6)

1. Institut biologicheskoy i meditsinskoy khimii AMN SSSR, Moskva.

FIRGANEK, Alojzy; PUDLIK, Stefan

Bonuses for white dollar workers in building and assembling enterprises. Praca zabezp spol 6 no.9:15-25 S '64.

FIRGANER, A.

"Tasks of Engineers and Technicians in the Light of Resolutions of the 3d Congress of Trade-Unions," P. 197. (PRZEGLAD TECHNICZNY, Vol. 75, No. 6, June 1954. Warszawa, Poland)

SO: Monthly List of East European Accessions, (EEAL), LC, Vol. 4, No. 1, Jan. 1955 Uncl.

BADURA, Stanislaw, mgr inz.; FIRGANEK, Boleslaw, mgr inz.; JANUSZ,
Jerzy, mgr inz.

Surze burkers at loading stations. Przegl gorn 20 no.10:
496-501 0 '64.

BADURA, Stanislaw, mgr inz.; FIRGANEK, Boleslaw, mgr inz.; JANUSZ, Jerzy,
mgr inz.

Interoperational storing bunkers for underground mine transport.
Glew inst gorn prace no.352/360:259-267 '64.

1. Central Mining Institute, Katowice.

BADURA, Stanislaw, mgr inz.; FIRGANEK, Boleslaw, mgr inz.; JANUSZ, Jerzy,
mgr inz.

Balancing containers in the main underground transport. Wiadom
gorn 16 no.3:84-88 Mr '65.

FIRGANG, Yevgeniy Vladimirovich; BAKANOVA, I.P., red.

[Electrostatics. Direct current; lectures in physics] Elektrostatika. Postoiannyi elektricheski tok; lektsii po fizike. Moskva, Mosk. poligraficheskii in-t, 1961. 100 p.
(MIRA 16:9)

(Electrostatics) (Electric currents)

FIRGER, F.L.

Improve the designs of filling trestles. Stroi. truboprov. 9
no.8:37 Ag '64. (MIRA 17:12)

1. Kiyevskiy filial Gosudarstvennogo instituta po proyektirovaniyu
magistral'nykh truboprovodov.

SARBAYEV, M.; FIRGER, I.

We achieve savings of means and a simplification of raw leather sorting procedures. Mias.ind.SSSR 33 no.5:31 '62. (MIRA 15:12)

1. Kiyevskiy myasokombinat.
(Kiev--Meat industry)

(Hides and skins)

FIRGER, I.

Dryer for bone glue. Mias.ind. SSSR 33 no.3:47 '62. (MIRA 15:7)

1. Kiyevskiy myasokombinat.
(Glue—drying)

FIRGER, I.V.

PHASE I BOOK EXPLOITATION

SOV/3978

Filinov, Sergey Artem'yevich, and Iosif Vladimirovich Firger

Spravochnik termista (Heat Treatment Handbook) Moscow, Mashgiz, 1960. 239 p.
Errata slip inserted. 16,000 copies printed.

Managing Ed. for Literature on Machine-Building Terminology (Leningrad Division, Mashgiz): Ye.P. Naumov, Engineer; Ed. of Publishing House: T.L. Leykina;
Tech. Ed.: A.I. Kontorovich; Ed.: G.F. Golovin, Candidate of Technical Sciences.

PURPOSE: This reference book is intended for skilled workers, crew leaders and foremen of heat-treatment plants.

COVERAGE: The book contains material on the heat treatment of steel, cast iron and nonferrous alloys. Data on the quality control of heat treatment and on the equipment of heat-treatment plants are presented. No personalities are mentioned. There are 42 Soviet references.

Card 1/5

DITYATKOVSKIY, Yakov Mironovich; FIRGER, Iosif Vladimirovich; SLITSKAYA, I.M., inzh., red.; SHILLING, V.A., red. izd-va; BELOGUROVA, I.A., tekhn. red.

[Cleaning parts with metal grit] Ochistka detalei metallicheskim peskom. Leningrad, 1961. 13 p. (Leningradskii Dom nauchno-tekhnicheskoi propagandy. Obmen peredovym opytom. Seriya: Liteinoe proizvodstvo, no.5)
(Metals--Finishing) (MIRA 14:7)

KAYUSHNIKOV, Petr Yakovlevich; FIRGER, I.V., red.

[Technological equipment for hardening without deformation] Tekhnologicheskaja osnastka dlia bezdeformatsionnoi zakalki. Leningrad, 1964. 10 p. (Leningradskii dom nauchno-tekhnicheskoi propagandy. Obmen peredovym opytom. Seriya: Metallovedenie i termicheskaja obrabotka, no.1)
(MIRA 17:7)

FILINOV, S.A.; FIRGER, I.V.; GOLOVIN, G.F., doktor tekhn. nauk,
retsenzent

[Handbook on the heat treatment of metals] Spravochnik
termista. Izd.2., perer. i dop. Moskva, Izd-vo "Mashino-
stroenie," 1964. 242 p. (MIRA 17:7)

S/081/60/000/013(I)/009/014
A006/A001

Translation from: Referativnyy zhurnal, Khimiya, 1960, No. 13(I), p. 424,
53251

AUTHORS: Kudryavtsev, N. T., Tyutina, K. M., Firger, S. M.

TITLE: Improvement of Anticorrosion and Decorative Properties of Zinc
Coatings by Alloying Them With Nickel ✓

PERIODICAL: Tr. Mosk. khim.-tekhrol. in-ta im. D. I. Mendeleeva, 1959, No. 26,
pp. 96-104

TEXT: Chlorammoniate and cyanide electrolytes are recommended to obtain a
Zn-Ni alloy. The composition of ammoniate electrolyte is in g/l: ZnO 15;
NH₄Cl 250; H₃BO₃ 20; NiCl₂·6H₂O 12-92; temperature - 40°C; D_c = 1.0-2.0
amp/dm². The alloy contains 10 - 25% Ni and is much more corrosion resistant
than pure Zn. The composition of cyanide electrolyte is (in g/l): Zn 32;
NaCN_{tot} 75-100; NaOH_{tot} 68; Ni 0.15-0.75; temperature - 20°C; D_c = 1-3
amp/dm²; cathode current efficiency = 80 - 90% (Abstractor's note: Subscript
"tot" is a translation from the original "obshch"; Obshchly - total). The

Card 1/2

S/081/60/000/013(I)/009/014
A006/A001

Improvement of Anticorrosion and Decorative Properties of Zinc Coatings by Alloying Them With Nickel 

deposit contains about 2 % Ni, possesses enhanced corrosion resistance and has an agreeable silvery shade.

S. Firger

Translator's note: This is the full translation of the original Russian abstract.

Card 2/2

FIRGAR, S. M., TUTINA, K. M., KUDRYAVTSEV, N. T.

"Electrodeposition of Zinc-Nickel Alloys for Protecting Steel articles against Corrosion"

Report submitted at the third Seminar on Electrochemistry, Karaikudi-3, S. RLY 26-29 Dec 61

1. Department of Electrochemical Technology, Mendeleef's Institute of Chemical Technology, Moscow.

37848

S/080/62/035/005/006/015
D204/D307

18.8310
AUTHORS:

Kudryavtsev, N. T., Tyutina, K. M. and Firger, S. M.

TITLE:

Protecting steel articles against corrosion with an electrolytic zinc-nickel coating

PERIODICAL:

Zhurnal prikladnoy khimii, v. 35, no. 5, 1962, 1035-1043

TEXT: Cathodic codeposition of Ni and Zn was studied from cyanide (I) and ammoniacal (II) solutions, obtaining alloys containing 0.5 - 2% Ni from the first electrolyte and 10 - 30 (or more)% Ni from the second. The following conditions are recommended for the production of high quality coatings (~2% Ni) from I: Electrolyte - Zn (as a complex) 32 g/l, NaCN 75 - 100 g/l, NaOH 70 g/l, Ni (as cyanide) 0.025 - 0.75 g/l; temperature - 20 - 25°C; current density (D) - 1 - 3 amp/dm². The corresponding current efficiencies were 80 - 96% and the anodes were pure Zn. The Ni content of the deposit increased with increasing Ni concentration in the electrolyte and fell with increasing D. Electrolyte II was investigated in

Card 1/2

Protecting steel articles ...

S/080/62/035/005/006/015
D204/D307

greater detail since deposits containing 10 - 20% Ni were found to be the best protection against corrosion. It was found that the Ni content in the alloy increased with temperature and pH and depended on the Ni concentration in II and on D as in the case of I. Best quality deposits containing 10 - 18% Ni were obtained at 40°C and at pH 6.5 - 6.8 from a solution containing 15 g ZnO, 12 - 36 g $\text{NiCl}_2 \cdot 6\text{H}_2\text{O}$, 250 g NH_4Cl and 20 g H_3BO_3 per liter, at a cathode current density of 1 - 3 amp/dm². The cathode current efficiency was 95% under these conditions and the anodes were Zn or Zn/Ni. Solution II was sufficiently stable w.r.t. composition and showed good buffer properties at pH 6 - 10. Pitting of the deposits could be partially alleviated by the addition of various organic compounds to the electrolyte, but was best avoided by stirring the solution during electrolysis. There are 2 figures and 2 tables.

SUBMITTED: April 13, 1961

Card 2/2

KUDRYAVTSEV, N.T.; FIRGER, S.M.; THUTINA, K.M.

Cathodic polarization and structure of deposits in a simultaneous electrodeposition of zinc and nickel. Zhur. prikl. khim. 36 no.9:1974-1980 D '63. (MIRA 17:1)

L 58560-65 EWP(c)/EWT(m)/EWP(z)/EWP(i)/EWP(b)/EWA(d)/EWP(t) Pad IJP(e) JD/
EW/WE

ACCESSION NO: AT6012865

UR/2539/63/000/044/0091/0095

26

25

B41

AUTHOR: Kudryavtsev, N. T., Firger, S. M., Dokina, N. N.

TITLE: Electrodeposition of a cadmium-nickel alloy

SOURCE: Moscow, Khimiko-tekhnologicheskij institut. Trudy, no. 44, 1963. Issledovani-
va v oblasti fizicheskoy khimii, analiticheskoy khimii i elektrokhimii (Research in the field
of physical chemistry, analytical chemistry and electrochemistry), 91-95

TOPIC TAGS: electroplating, alloy electrodeposition, cadmium alloy deposition, nickel
alloy deposition, cadmium corrosion resistance, electrolyte composition

ABSTRACT: The purpose of this study was to increase the corrosion resistance of cadmium
alloy with nickel and thus to protect parts operating under severe corrosive con-
ditions of organic fuel. Cadmium-Nickel alloys were deposited at wide
temperatures and moisture content, in an atmosphere consisting of the pro-
ducts of electrolysis. A study was made of the influence of the concentration
components, temperature, pH of the solution, current density and stirring on
the deposition of the deposit, current efficiency, and capacity of solution.
The deposition rate of cadmium was higher than that of nickel.

Card 1/2

L 52560-65

ACCESSION NR: AT5012665

deposit a Cd-Ni alloy containing 10 to 15% Ni, an electrolyte containing ethylenediamine is recommended having the following composition: $K_4P_2O_7$ - 200 g/L, CdO - 6 g/L (0.1 N), $NiSO_4 \cdot 7H_2O$ - 24 g/L (0.1 N), ethylenediamine - 15 ml/L (20% solution), gum 2 g/L; pH 3.5. The conditions of electrolysis are: temperature 40-50°C current density up to 0.5 A/dm² without stirring and up to 2 A/dm² with stirring cadmium anodes; anodic current means. Orig. art. has: 1 figure and 1 table.

ASSOCIATION: Moskovskiy khimiko-tekhnologicheskiy institut (Moscow Chemical Engineering Institute)

SUBMITTED: 00

ENCL: 00

SUB CODE: IC, MM

NO REF SOV: 005

OTHER: 004

Card 2/2 7/6

BABADZHAN, A.A.; FIRS V. Ya.

Scientific investigation and advanced technology in reseach
projects at the Unipromed' Institute. TSvet. met. 38 no.1:16-22
Ja '65 (MIRA 18:2)

BULIGESCU, L., dr., candidat in stiinte medicale; CONSTANTIN, Ileana, dr.;
FIRICA, A., dr.; MANU, P., dr.; MIRCEA, C., dr.; STANESCU, Eugenia, dr.;
~~BARBULESCU, Alexandru, dr.~~

Considerations on a case of thrombocythemic megakaryocytic myelosis.
Med. intern. 13 no.10:1421-1424 0 '61.

1. Lucrare efectuata in Clinica Medicala "C. Davila".

(BLOOD DISEASES case reports)

ROMANIA

FIPIA, Th., Professor; CORCI, V., MD; RADULESCU, M., MD;
DRAGUSANU, I., MD.

Bucharest, Literna, No 6, Nov-Dec 68, pp 5/1-5/4.

"Labor Accidents in Construction Enterprises in Bucharest."

Run *but*

(4)

DRAGANESCU, St.,; FIRICA, Th.,; OLTEANU, I.,; DIMACESCU, O.,; VOINESCU, S.

Anatomicoclinical study of traumatic disease of the brain in initial early and intermediate stages. Bul. stiint., sect. med. 7 no.3: 837-849 July-Sept 55.

(BRAIN, wds. & inj.

compl., edema, hemorrh., vasodilation, stasis & venous thrombosis)

(EDEMA

brain, post-traum.)

(CEREBRAL HEMORRHAGE

traum., compl. & evolution)

(CEREBRAL EMBOLISM AND THROMBOSIS

venous thrombosis, traum)

RUMANIA/Human and Animal Physiology - Digestion.

TJ7

Abs Jour : Ref Zhur - Biol., No 7, 1958, 31855

Author : Firica, Th., Teodorescu, M., Dumitrescu Eugenia, Ambrus, I.

Inst :

Title : Significance of Biological Constants During Acute Pancreatitis.

Orig Pub : Chirurgia, 1957, 6, No 3, 364-372.

Abstract : The authors consider the increase of amylase (I) in blood serum as a single specific test during acute pancreatitis (40 cases). Acute pancreatitis with normal content of I in blood is met only as an exception. No parallelism was established between the condition of the affliction and the degree of increase of I.

Card 1/1

FIRICA TEODOR, (Lecturer); CONDREA, H.; NICCA, I.; BROSTEANU, M.

Abdominal epilepsy in the differential diagnosis of the acute abdominal syndrome. Rumanian M. Rev. 2 no.1:67-70 Jan-Mar 58.

(EPILEPSY, differ. diag.

abdom. in acute abdom)

(ABDOMEN, ACUTE, differ. diag.

abdom. epilepsy)

RESERPTA MEDICA Sec 9 Vol 13/2 Surgery Feb 59

852. (300) OBSERVATIONS IN CONNECTION WITH 700 TRANSFUSIONS PERFORMED VIA THE SUBCLAVIAN VEIN - Observații pe 700 de transfuzii practicate în vena subclaviculară - Firică Th. and Balaban I. Gr. Clin. Chir., Spit. de Urgență, București - CHIRURGIA (București) 1958, 7/3 (361-366)

The method is indicated whenever other veins cannot be used for transfusion, and especially in severely shocked patients. As it is not free of certain incidents it must be carried out by qualified persons only, for although indispensable in a number of cases, the subclavian route should remain an exceptional procedure.

FIRICA, Th., prof.; MUNTEANU, V., dr.; TUDOSE, N., dr.; ANDRONESCU, C., dr.;
ALJNEANU, Ileana, dr.

Emergency surgery in digestive hemorrhages caused by rupture of
esophageal or gastric varices. Med. intern. 13 no.11:1541-1548 N '61.

(HEMORRHAGE, GASTROINTESTINAL surgery)
(ESOPHAGEAL VARICES complications)

POLAND/Fitting Out of Laboratories - Instruments.
Their Theory, Construction, and Use.

H-

Abs Jour : Ref Zhur - Khimiya, No 3, 1957, 8744

Author : Firich, J.

Inst :

Title : A Mechanical Laboratory Mortar

Orig Pub : Przegl. odlewn., 1956, 6, No 3, 79-80.

Abstract : The design of a mechanical laboratory mill for the grinding of ores, alloys, slags, etc. is described. The time required for the reduction of an average laboratory sample of initial grain size 1-2 mm to an average grain size of \sim 0.2 mm is 15-20 min.

Card 1/1

FIRICH, M.

Contribution to the knowledge of Myxomycetes from Lower Silesia.
Acta soc botan Pol 31 no.1:153-168 '62.

1. Institute of General Biology, High Medical School, Wroclaw.

ROMANOVSKIY, P.I.; FIRICHENKOVA, L.T.

Generalized norms and almost-periodicity. Uch.zap.MOPI 77:
213-234 '59. (MIRA 13:5)
(Functions, Periodic)

FIRICHENKOVA, L.T.

Conditions of complete continuity of a common nonlinear integral operator, operating in an orlicz's space. Uch.zap.MOPI
77:235-246 '59. (MIRA 13:5)
(Operators (Mathematics)) (Spaces, Generalized)

FIRICHENKOVA, L.T.

Almost-periodic functions as normed by orlicz. Uch.zap.
MOPI 77:247-255 '59. (MIRA 13:5)
(Functions, Periodic)

FIRIKA, T.; MUNTEANU, V.

So-called spontaneous biliary peritonitis. Khirurgia 35 no.9:71-
73 '59. (MIRA 13:12)

(PERITONITIS)

FIRISYUK, V. R. [Fyrysiuk, V. R.]; SAMBURG, Ya.L.

Conveyor line for the processing of waterfowl in poultry plants.
Khar. prom. no.1:6-15 Ja-Mr '63. (MIRA 16:4)

1. Gosudarstvennyy komitet Soveta Ministrov UkrSSR po koordinaatsii nauchno-issledovatel'skikh rabot (for Firisyuk).
2. Poltavskiy mashinostroitel'nyy zavod myasnogo oborudovaniya (for Samburg).

(Poultry plants—Equipment and supplies)
(Assembly-line methods)

S/136/60/000/011/009/013
E193/E483

AUTHORS: Butomo, D.G., Zedin, N.I. and Firkovich, I.A.

TITLE: Anisotropy of Mechanical Properties of Chromized Bronze¹⁸
BrKh 0.5 Strip

PERIODICAL: Tsvetnyye metally, 1960, No.11, pp.65-69

TEXT: The object of the present investigation was to study the relationship between the form in which chromium is present in chromium bronze and the mechanical properties of this alloy after heavy deformation. The experimental alloy (in the form of hot-rolled sheet, 13 mm thick) contained 99.08% Cu, 0.78% Cr (0.27% of which was in solid solution), 0.05% Fe and traces of Ni and Pb. Strips of this material were held for 1 h at 700, 850 and 1000°C, after which half of the specimens were quenched from each of the annealing temperatures and the other half were furnace-cooled to room temperature. Then all the heat-treated specimens (including a sample of the starting, hot-rolled material) were cold-rolled in the direction normal to the direction of hot rolling, the total reduction in thickness attained (without any intermediate annealing) being 95.4%. The cold-worked specimens were then annealed at temperatures ranging from 200 to 900°C, after which they were

Card 1/2

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E193/E483

Anisotropy of Mechanical Properties of Chromized Bronze BrKh
0.5 Strip

subjected to tensile tests (determination of the U.T.S. and elongation in the direction parallel and at 45° to the direction of cold rolling), deep drawing tests, metallographic examination and X-ray diffraction analysis. It was concluded that an increased content of chromium in solid solution, attained by quenching from 1000°C, inhibits the subsequent development of preferred orientation in heavily deformed chromium bronze and improves the mechanical properties of cold-worked and subsequently annealed material. Heavy (95%) deformation of this alloy (preliminarily annealed by heating to 700 to 800°C and furnace-cooled) followed by an annealing treatment, yields material characterized by pronounced recrystallization texture and by inferior mechanical properties. There are 4 figures and 6 Soviet references.

Card 2/2

I, 39468-66 EWT(m)/T/ENP(w)/ENP(t)/ETI IJP(c) JH/JD/HW

ACC NR: AP6019507 SOURCE CODE: UR/0129/66/000/006/0044/0047

AUTHOR: Butomo, D. G.; Firkovich, I. A.

ORG: "Krasnyy vyborzhets" Plant (Zavod "Krasnyy vyborzhets")

TITLE: The reasons for the formation of cracks in Cunial alloy A (MNA-13-3)

SOURCE: Metallovedeniye i termicheskaya obrabotka, no. 6, 1966, 44-47

TOPIC TAGS: alloy, copper containing alloy, nickel containing alloy, aluminum containing alloy, material fracture, crack propagation, alloy phase diagram, metal heat treatment, hardness, crystal lattice parameter / MNA-13-3 alloy

ABSTRACT: In addition to copper, the melts of the alloy investigated contained: 13% nickel, 0.8% iron. The amount of aluminum varied and was 0.87, 1.73, and 2.98%. The article gives a phase diagram of the Cu-Ni-Al system. After melting of the alloys, rods with a diameter of 30 mm were produced by hot pressing in a 600 ton press. From these rods, samples 30 mm long were cut. Preliminary heat treatment consisted in heating to 950°C (holding time 1 hour) followed by quenching in water. The samples were then annealed at 300-900°C for 4 hours, followed by rapid cooling. After the heat treatment, a study was made of the hardness and the microhardness, the parameters of the crystal lattice

Card 1/2

UDC: 620.191.32:669.14.018.58

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ACC NR: AP6019507

were measured, and the microstructure was studied. In addition, the samples with 2.98% aluminum were subjected to mechanical tests at high temperatures. Results show that the hardness, the microhardness, and the lattice parameters after annealing at 950°C increase with an increase in the aluminum content. Detailed results are exhibited in a series of tables and figures. It is concluded that the reason for the formation of cracks during low temperature heating is the stress due to the large difference of the microhardness at the grain boundaries and in the grains. Orig. art. has: 4 figures and 2 tables.

SUB CODE: 11/ SUBM DATE: none/ ORIG REF: 002

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